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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/610,116	06/30/2000	Ben Speiser	FORE-65	4695

7590
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08/26/2003

EXAMINER

KADING, JOSHUA A

ART UNIT	PAPER NUMBER
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2661

DATE MAILED: 08/26/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/610,116

Applicant(s)

SPEISER ET AL.

Examiner

Joshua Kading

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☒ Claim(s) 1,6,9,12,13 and 16 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. This application, filed under former 37 CFR 1.60, lacks formal drawings. The informal drawings filed in this application are acceptable for examination purposes. When the application is allowed, applicant will be required to submit new formal drawings. In unusual circumstances, the formal drawings from the abandoned parent application may be transferred by the grant of a petition under 37 CFR 1.182.

Specification

2. The disclosure is objected to because of the following informalities:

Page 9, lines 3-4 state, "40/80, 80/120, 120/160, 160/240 fast, 240 fast/240 slow, or 240 slow/480". This terminology is inconsistent with previous terminology used in the specification. It should read, --40G/80G, 80G/120G, 120G/160G, 160G/240G fast, 240G fast/240G slow, or 240G slow/480--. It should also be noted that there are several other inconsistencies of this nature in the specification that need correction; e.g. Page 9, line 28 states, "240 mode". It should read, --240G mode--.

It should also be noted that the terms "240G fast" and "240G slow" are unclear and not defined in the specification.

Appropriate correction is required.

Claim Objections

3. Claims 1, 6, 9, 12, 13, and 16 are objected to because of the following informalities:

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Claim 1, line 13 and claim 12, lines 7-8 state, "reusing the transmitters and receivers where they can be reused". This is redundant and leads to confusion. It should read, "reusing the transmitters and receivers where appropriate".

Claim 4, line 2, and claim 15, line 4 state, "240G slow, 240G fast". This is unclear and not defined in the specification or the claim language.

Claim 6, lines 2-3 states, "40/80, 80/120, 120/160, 160/240 fast, 240 fast/240 slow, or 240 slow/480". This terminology is inconsistent with previously used terminology in the specification and claims. It should read, --40G/80G, 80G/120G, 120G/160G, 160G/240G fast, 240G fast/240G slow, or 240G slow/480--.

Claim 9, lines 1-3 read, "the assignments between transmitters and receivers communicate with each other through the assignments at up to 1.3 GHz." This sentence means the assignments communicate with each other through the assignments. This doesn't make sense. It should read, "the transmitters and receivers communicate with each other through the assignments at up to 1.3 GHz."

Claim 12, line 3 and claim 16, line 2 read, "assigning assignments". This is awkward. It should read, "creating assignments".

Claim 13, lines 2-3 read, "the changing the mode no more than one step up or down at a time." The first "the" does not make sense in this sentence; and it is unclear what is meant by "one step up or down". It should read, --changing the mode no more than one step up or down in the mode sequence at a time--.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

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4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 4-13, and 15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claims 4 and 15, the terminology "240G slow" and "240G fast" is used. These terms are not defined in the specification or the claim language and it is unclear what is meant by "fast" and "slow".

Claim 12 recites the limitation "the fabrics, port cards and networks" in claim 12, line 5. There is insufficient antecedent basis for this limitation in the claim.

Claims 5-11, 13, and 16-17 are rejected because they depend on a rejected claim.

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 14 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 14, lines 2-3 state, "rearranging the mux structure of the network". It is unclear from the specification how one with ordinary skill in the art would rearrange the structure of a mux.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Lentz et al. (U.S. Patent 5,440,752).

In regard to claim 1, Lentz discloses a switch comprising:

a port card (figure 3, element P₀);

a network connected to the port card, the network having transmitters and receivers that communicate with each other and have assignments between each other (figure 2, element 54 where the arrows (e.g. elements 72,73) indicate receiver and transmitter points);

a fabric connected to the port card through the network to send and receive fragments of packets to or from the port card, the port card, fabric and network having a plurality of modes of operation (figure 2, elements 55-57, 72, 73 where elements 55-57 constitute the fabric which has receiving and sending points for any data (elements 72, 73) and elements 60, 61 indicating two modes of read and write); and

a control mechanism connected to the transmitters and receivers which changes the assignments according to the mode, the control mechanism changing the mode and reusing the transmitters and receivers where they can be reused (figure 2, elements

71a, 70a, PAU₀ implying PAU₀ is the control mechanism that must change the assignments according to the different modes).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lentz et al. in view of Heddes et al. (U.S. Patent 5,311,509).

In regard to claim 2, Lentz et al. discloses a switch comprising: a port card (figure 3, element P₀); a network connected to the port card, the network having transmitters and receivers that communicate with each other and have assignments between each other (figure 2, element 54 where the arrows (e.g. elements 72,73) indicate receiver and transmitter points); a fabric connected to the port card through the network to send and receive fragments of packets to or from the port card, the port card, fabric and network having a plurality of modes of operation (figure 2, elements 55-57, 72, 73 where elements 55-57 constitute the fabric which has receiving and sending points for any data (elements 72, 73) and elements 60, 61 indicating two modes of read and write); and a control mechanism connected to the transmitters and receivers which changes the assignments according to the mode, the control mechanism changing the mode and reusing the transmitters and receivers where they can be reused (figure 2, elements 71a, 70a, PAU₀ implying PAU₀ is the control mechanism that must change the

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assignments according to the different modes). Lentz et al. lacks a switch, wherein the network is a gigabit network, the transmitters are gigabit transmitters and the receivers are gigabit receivers. However, Heddes et al. disclose a switch, wherein the network is a gigabit network, the transmitters are gigabit transmitters and the receivers are gigabit receivers (col. 3, line 33 where it is implied by the "1,2/2,4 Gb/sec" that the network, including transmitters and receivers, constitute a gigabit network). It would have been obvious to one with ordinary skill in the art to combine the gigabit network of Heddes et al. with the switch of Lentz et al. The motivation being to have a faster network.

In regard to claim 3, Lentz et al. discloses a switch comprising: a port card (figure 3, element P₀); a network connected to the port card, the network having transmitters and receivers that communicate with each other and have assignments between each other (figure 2, element 54 where the arrows (e.g. elements 72,73) indicate receiver and transmitter points); a fabric connected to the port card through the network to send and receive fragments of packets to or from the port card, the port card, fabric and network having a plurality of modes of operation (figure 2, elements 55-57, 72, 73 where elements 55-57 constitute the fabric which has receiving and sending points for any data (elements 72, 73) and elements 60, 61 indicating two modes of read and write); and a control mechanism connected to the transmitters and receivers which changes the assignments according to the mode, the control mechanism changing the mode and reusing the transmitters and receivers where they can be reused (figure 2, elements 71a, 70a, PAU₀ implying PAU₀ is the control mechanism that must change the assignments according to the different modes). Lentz et al. lacks a switch, wherein the

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network includes a mux structure that makes the assignments between transmitters and receivers. However, Heddes et al. disclose a switch, wherein the network includes a mux structure that makes the assignments between transmitters and receivers (figure 1, elements 11, 12.1, 13.1 where element 11 is taken to be a mux structure that is creating assignments between the transmitter (e.g. 12.1) and the receiver (e.g. 13.1)). It would have been obvious to one with ordinary skill in the art to include the mux structure of Heddes et al. to the switch of Lentz et al. The motivation being to provide a path between the transmitters and receivers to have a working switch.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Kading whose telephone number is (703) 305-0342. The examiner can normally be reached on M-F: 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas Olms can be reached on (703) 305-4703. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



Joshua Kading
Examiner
Art Unit 2661

JK
August 21, 2003



KENNETH VANDERPUYE
PRIMARY EXAMINER

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